

# Work Order ID 75512

October-24-11 11:50:37 AM

**\*75512\***

*Boal*

Page 1

Item ID: D4165-9 *Flat only* Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Angle  
 Start Date: 24/10/2011 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 27/10/2011 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: *M.C. J* Date: *11/10/24* Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4165	B								

100 0.00  
**\*100\***  
 Waterjet *IB11-10-25*  
 FLOW CNC Waterjet *2024 - 04C*  
 Memo 0.00  
 1-Cut as per *B* dwg  
 Dwg Rev: *B*  
 Prog Rev: *B*  
 2-Deburr if necessary  
 110 0.00  
**\*110\***  
 QC *IB11-10-25*  
 Quality Control Memo 0.00

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

**Part No:** \_\_\_\_\_ **PAR #:** \_\_\_\_\_ **Fault Category:** \_\_\_\_\_ **NCR:** Yes No **DQA:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Resolution:** \_\_\_\_\_ **Disposition:** \_\_\_\_\_ **QA: N/C Closed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75512

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 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 0.00				<u>70</u>			
123 <b>*123*</b> Brake NC Brake NC	Bend as per dwg  Memo	0.00 0.00							
127 <b>*127*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00							

*Handwritten notes:*  
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 A ymf 11-10-24

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**Work Order ID 75512****\*75512\***

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October-24-11 11:50:37 AM

Item ID: D4165-9

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Angle

Start Date: 24/10/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 27/10/2011 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00							
<b>*130*</b>									
HandFinish	Memo	0.00							
Hand Finishing									
135	QC3- Inspect Part Finish	0.00							
<b>*135*</b>									
QC	Memo	0.00							
Quality Control									
140	Identify as per dwg & Stock Location: _____	0.00							
<b>*140*</b>									
Packaging	Memo	0.00							
Packaging									

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

**Work Order ID 75512****\*75512\***

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October-24-11 11:50:37 AM

Item ID: D4165-9      Accept      **\*N900040100\***      Setup Start **\*NS1\***  
Revision ID:      Stop **\*NS2\***  
Item Name: Angle  
Start Date: 24/10/2011    Start Qty: 1.00      **\*1\***      Cust Item ID:  
Required Date: 27/10/2011    Req'd Qty: 1.00      **\*1\***      Customer:  
Reference:

Approvals:    Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_      Run Start **\*NR1\***  
                 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_      Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC21- Final Inspection - Work Order Release	0.00							
<b>*150*</b>									
QC	Memo	0.00							
Quality Control									

11/10/25 *[Signature]*  
MF  
11-10-25

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries



# Picklist Print

October-24-11 11:50:42 AM

Page 1

Work Order ID: 75512

**\*75512\***

Parent Item: D4165-9

**\*D4165-9\***

Parent Item Name: Angle

Start Date: 24/10/2011

Required Date: 27/10/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 11.03.09 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040		Purchased	No			100	sf	110.5184	0.634	0.667368			

**\*M2024T3S 040\***

2024-T3 .040 sheet

**\*\***

FB11-10-25

Location

Loc Qty

Loc Code

MAT022

110.518421

113162

1.1

117684

109.418421

117.6824

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

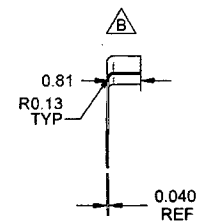
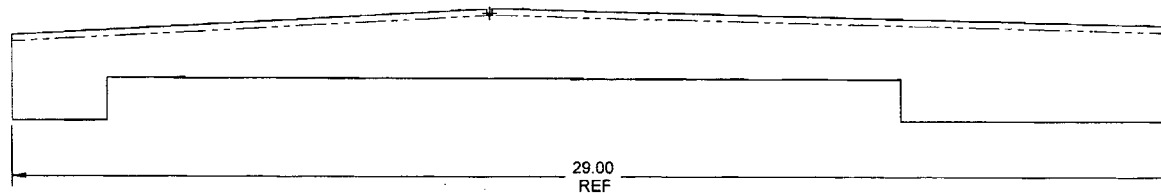
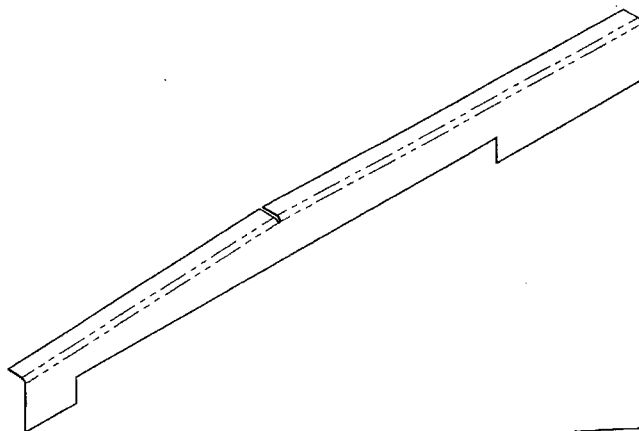
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

NO 75512 M.L.-J  
11/10/24



**D4165-9 ANGLE**  
(REF. EAGLE DRAWING No. D2046902 P/N EA20469-17)

**RELEASED**  
2011-04-15

**NOTES:**

- 1) MATERIAL: MAKE FROM D4165-9F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.29 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4165	SHEET 5 OF 7
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	VRD PARTS	NTS
DATE	11.04.11	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OF COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

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W/O:		WORK ORDER CHANGES					
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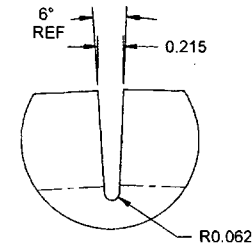
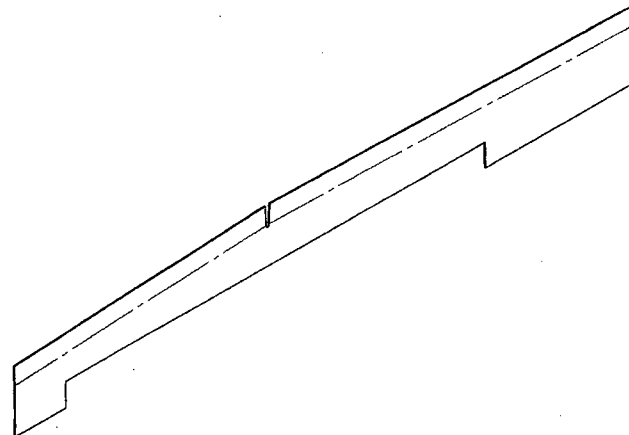
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

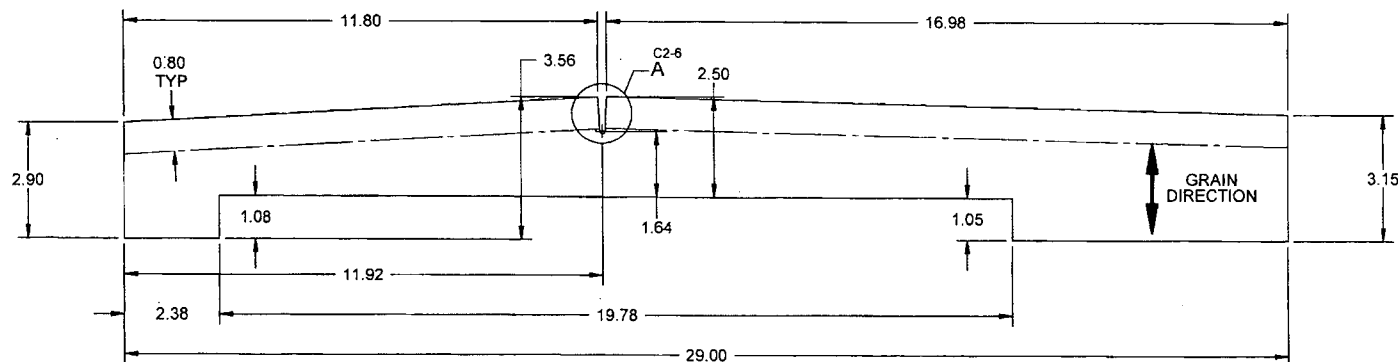
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

75512



**DETAIL A** C5-6  
SCALE 3X







**D4165-9F FLAT PATTERN**  
(REF. EAGLE DRAWING No. D2046902 P/N EA20469-17)

**RELEASED**  
2011-04-15

**NOTES:**

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.040 THICK  
QQ-A-250/4 OR AMS-QQ-A-250/4  
OR AMS 4037  
OR ASTM B209  
PER DART SPEC M2024T3S.040
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.29 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		<b>D4165</b>	SHEET 6 OF 7
APPROVED		TITLE	SCALE
DE APPR.		<b>VRD PARTS</b>	NTS
DATE	11.04.11	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries